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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,374	01/02/2002	Robert C. Glenn	42390P12279	9816
8791 7590 09/12/2007 BLAKELY SOKOLOFF TAYLOR & ZAFMAN 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040			EXAMINER BURD, KEVIN MICHAEL	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 09/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/039,374

Applicant(s)

GLENN, ROBERT C.

Examiner

Kevin M. Burd

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 20-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17,18 and 20-24 is/are allowed.
- 6) ☒ Claim(s) 1-3,11,14,25 and 27-30 is/are rejected.
- 7) ☒ Claim(s) 4-10,12,13,15,16 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

1. This office action, in response to the remarks filed 6/21/2007, is a non-final office action.

Response to Arguments

2. Applicant's arguments, see the remarks filed 6/21/2007, with respect to the rejections of claims 1-3, 11, 14, 25 and 27-30 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection are made in view of Chao and Muoi (US 4,415,803). A new rejection of claims 28-30 under 35 USC 101 is stated below.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 28-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 28-30 claim a machine readable medium containing instructions which, when executed by a machine, cause said machine to perform operations. This language is inconsistent with the permissible language stated in the MPEP 2106 and in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility. The examiner suggests, "a computer readable medium containing instructions, which when executed by a

computer, cause said computer to perform operations.” Corrections are also required in line 1 of claims 29 and 30.

Claims 28-30 disclose the claimed medium is an electromagnetic signal. Page 43, paragraph 0099 states the machine readable medium may include electrical, optical, acoustical or other form of propagated signals. The interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility states that a claim reciting a signal encoded with functional descriptive material does not fall within any of the categories of patentable subject matter since a signal is energy and not matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 11, 14, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chao et al (US 6,380,783) in view of Muoi (US 4,415,803).

Regarding claims 1 and 25, Chao discloses outputting first and second control signals (IA and IB) from the weighted current bias generator (figures 1 and 16 and column 3, lines 43-45). The amplitude of one of the signals are increased and decreased at a rate that is substantially equal to the decrease and increase of the other signal. Figure 6 shows this relationship. The change to the amplitudes is within high and low amplitude boundaries. This is shown in figure 6 and is within the voltage described

in column 4, lines 28-30 and zero. Figure 3 shows the transfer characteristic of the phase control circuitry of the interpolator. Chao fails to disclose charge circuitry for maintaining the control signal amplitudes. Chao does disclose outputting the correct amplitude of the control signals to the downstream elements in figure 1. Muoi discloses a receiver circuit that maintains an output signal at a predetermined amplitude (column 3, lines 1-7). Charge circuitry is used to maintain the amplitudes. It would have been obvious for one of ordinary skill in the art at the time of the invention to utilize the charge circuitry of Muoi in the circuit of Chao. Maintaining the proper amplitude of the control signals will prevent degradation in the signal. By preventing changes in the amplitude of the signal, the receiver will remain stable and errors will be prevented in the processed data.

Regarding claim 2, Chao discloses weighted current generator 16 includes a constant voltage (column 4, lines 28-30) and a complementary first and second currents (column 2, lines 46-48) creating a constant common voltage between the first and second amplitude.

Regarding claim 3, Chao discloses transistors 42-48 provide the reference voltage from the constant power source. The output is coupled to increase the first and second amplitude in response to the common mode voltage being less than the reference voltage and decrease the amplitudes in response to the voltage being greater than the reference voltage (column 5, lines 34-43).

Regarding claim 11, Muoi discloses the circuitry for maintaining the control signal amplitudes comprising a capacitance circuit (figures 1 and 2).

Regarding claims 14, 21, 22 and 27, Chao discloses the increasing and decreasing of the amplitudes as shown in figure 6.

Allowable Subject Matter

Claims 17, 18 and 20-24 are allowed.

Claims 4-10, 12, 13, 15, 16 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin M. Burd whose telephone number is (571) 272-3008. The examiner can normally be reached on Monday - Friday 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Payne can be reached on (571) 272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kevin M. Burd
9/8/2007

KEVIN BURD
PRIMARY EXAMINER